PTO/SB/08a (08-03)

Approved for use through 07/31/2008, OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE o persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE

Substitute for form 1449A/PTO

STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of 3

Complete If Known					
Application Number	10/771,152				
Filing Date	February 4, 2004				
First Named Inventor	Ravi B. Gopal				
Art Unit	2857				
Examiner Name					
Attorney Docket Number	9351-382				

			U.S. PATENT	DOCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan
Initials *	No.1	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited pocinient	Passages or Relevant Figures Appear
513	1	US- 3,676,770	07-11-1972	Sharaf et al.	
1	2	US- 3,753,094	08-14-1973	Furuishi et al.	
	3	US- 4,071,819	01-31-1978	De Santis	
	4	US- 4,316,185	02-16-1982	Watrous et al.	
	5	US- 4,352,067	09-28-1982	Ottone	
	6	US- 4,484,140	11-20-1984	Dieu	
	7	US- 4,697,134	09-29-1987	Burkum et al.	
	8	US- 4,743,855	05-10-1998	Randin et al.	X
	9	US- 4,972,181	11-20-1990	Fiene	
	10	US- 5,047,722	09-10-1991	Wurst et al.	
	11	US- 5,170,124	12-08-1992	Blair et al.	· /
	12	US- 5,281,920	01-25-1995	Wurst	
	13	US- 5,416,416	05-16-1995	Bisher	
	14	US- 5,608,307	03-04-1997	Garrett et al.	
	15	US- 5,670,861	09-23-1997	Nor	
	16	US- 5,712,568	01-27-1998	Flohr et al.	
	17	US- 5,773,978	06-30-1998	Becker	/
	18	US- 5,914,606	06-22-1999	Becker-Irvin	X .
4	19	US- 5,923,148	07-13-1999	Sideris et al.	1
- M	20	US- 6,002,238	12-14-1999	Champlin	

		FOREIGN PA	TENT DOCU	MENTS		
Evenines	Cite	Foreign Patent Document	Dublication.	Name of Patentee or	Pages, Columns, Lines, Where Relevant	
Examiner Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁰
SB	21	JP01160367	06-23-1989	Toshiba Electric Equip Corp.		
7	22	JP2000092732	03-31-2000	Denso Corp.		
	23	JP359215674	12-05-1984	Sanyo Electric Co Ltd		
	24	WO 99/18448	04-15-1999	Guardian Link Limited	V	
	25	WO 00/31557	06-02-2000	Korea Kumbo Petrochemical Co., Ltd.		
	26	WO 01/09631	02-08-2001	Elliott Industries Ltd.		
	27	WO 01/14898	03-01-2001	Plug Power, Inc.	7	$\neg \top$
	28	WO 02/03086	01-10-2002	Ballard Power Systems Inc.	7	\int
	29	· WO 02/27342	04-04-2002	Hydrogenics Corporation		/

			——————————————————————————————————————		
Signature Considered C6/00/07	Examiner Signature	W/18	Date Considered	06/0	6/83

*EXAMINER: Initial if reference considered, which or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (options). *See Kinds Codes of USPTO Patent Documents at www.usplo.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. **Sind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Applicant is to place a check mark here if English language Translation is stateched.
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patenta, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b(08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO			Complete if Known			
15154	201447	ON DIGGL COURT	Application Number	10/771,152		
INFORMATION DISCLOSURE			riling Date	February 4, 2004		
STATEMENT BY APPLICANT		First Named Inventor	Ravi B. Gopal			
			Art Unit	2857		
(Use as many sheets as necessary)		Examiner Name				
Sheet	2	of 3	Attorney Docket Number	9351-382		

		NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ2	-
SB	30	T. E. Springer, T. A. Zawodzinski, M.S. Wilson and S. Gottesfield, "Characterization of polymer electrolyte fuel cells using AC impedance spectroscopy", Journal of the electrochemical Society of America, 143(2), p. 587-599, 1998		
5B	31	J.R. Selman and Y.P. Lin, "Application of AC impedance in fuel cell research and development", Electrochemica Acta, 38(14), p. 2063-2073, 1993		
SB	32	B. Elsener and H. Bolmi, "Computer-assisted DC and AC techniques in electrochemical investigations of the active-passive transition", Corrosion Science, 23(4), p. 341-352, 1983		L
				L
- · · ·				
			1	
-	<u> </u>			
Examiner Signature	1	Date Considered 86/76/89		

*EXAMINER: thitial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Tredemark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are require

	Substitute for form 1449A/PTO					Complete if Known				
			Application Number	10/771,152	***************************************					
	INFO	RMATI	ON DI	SCLOSURE	Filing Date	February 4, 2004				
	STATEMENT BY APPLICANT		First Named Inventor	Ravi B. Gopal						
					Art Unit	2857				
		(Use as ma	ny sheets a	as necessary)	Examiner Name	·				
abla	Sheet	3	of	3	Attorney Docket Number	9351-382				

			U.S. PATENT	OCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant
Initials *	No.	Number - Kind Code ² (if known)	MM-DD-YYYY	Caed Occument	Passages or Relevant Figures Appear
515	33	US- 6,011,379	01-04-2000	Singh et al.	
SB	34	US-6,037,777	03-14-2000	Champlin	
SH	35	US- 6,140,820	10-31-2000	James	
52	36	US- 6,160,382	12-12-2000	Yoon et al.	
SØ	37	US- 6,239,579	05-29-2001	Dunn et al.	
SB	38	US- 6,281,684	08-28-2001	James	
SB	39	US- 6,285,164	09-04-2001	Noda et al.	
SB	40	US- 6,297,618	10-02-2001	Emori et al.	\ /
SB	41	US- 6,307,350	10-23-2001	Alderman	· V
SIJ	42	US- 6,313,750	11-06-2001	Lacy	A
30	43	US- 6,335,611	01-01-2002	Sasaki	
SB	44	US- 6,406,806	06-18-2002	Keskula et al.	
SB.	45	US- 6,417,670	. 07-09-2002	Kang	
513	46	US- 6,432,569	08-13-2002	Zeilinger et al.	
-500	47	US- 6,455,180	09-24-2002	Mowery et al.	
S	48	US- 6,519,539	02-11-2003	Freeman et al.	
2/2	49	US- 2002/0051899	05-02-2002	Keskula et al.	
773	50	US- 2002/0053896	05-09-2002	Adams et al.	
SIS	51	US- 2002/0180447	12-05-2002	Masse et al.	
<15	52	US- 2002/0196025	12-26-2002	· Freeman et al.	1

		FOREIGN PA	TENT DOCU	MENTS		
Eveniens	Cito	Foreign Patent Document	D. A. Francisco	Name of Patentee or	Pages, Columns, Lines, Where Relevant	[
Examiner (Initials*	Cite No. ¹	Publication Date MM-DD-YYYY		Applicant of Cited Document	Passages or Relevant Figures Appear	T⁵
SB	53	WO 03/083498	10-09-2003	Hydrogenics Corporation		
373	54	EP 0575205	12-22-1993	Ford Werke AG		
•			\langle			
_						
						L .

EXAMINER: Initial if reference considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precode the serial number of the patent document. Nation of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 33 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.